US ERA ARCHIVE DOCUMENT

Future Research / Information Needs

Barry Wallerstein, D.Env Executive Officer, South Coast AQMD Energy & Climate Change Workshop October 11, 2007

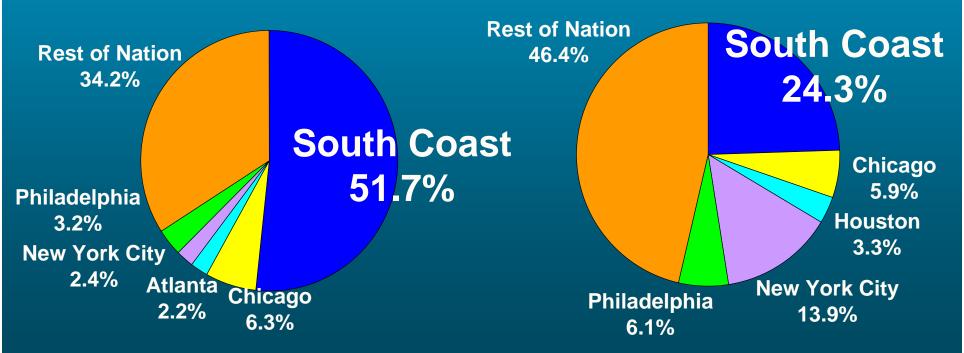


- 4-county region
- 10 million vehicles
- -16½ million people Significantly cleaner air, but more work needed

SCAB's Disproportionate Air Pollution Exposure

Annual Average PM2.5 (NAAQS = 15 ug/m³)

8 Hour Ozone (NAAQS = 0.08 ppm)



Population-weighted exposures above the NAAQS, based on 2000-02 AIRS data

Climate Change and Air Quality

- Higher Temperature
 - Higher Evaporative Emissions
 - -Higher Ozone Formation

Climate Change and Air Quality (cont)

- Past SCAQMD Actions
 - 1990 Policy on Global Warming and Stratospheric Ozone Depletion
 - 1991-1994: Subsequent impact assessments and rulemakings (ODCs, etc.)
 - CEQA Review

New Opportunities

- Synergies Between GHG, Criteria Pollutants, and Air Toxics
 - –Energy Efficiency
 - –Demand Side Management Programs
 - Renewable Energy
 - –Land Use & Transportation Planning

Role of Regional Agency

- Experience in Program Implementation
 - Regulatory Programs
 - –Incentive Programs
 - Public Education/Outreach Programs
 - -Research Programs
 - –Technology Demonstration Programs

Established Regional Agency Networks

- Stakeholders
 - Local Businesses
 - Community Representatives
 - Local Governments
 - –Academia

Information Needs

- Comprehensive Resource Network
 - –Inventory Protocols & Tabulated Data
 - –Technology Development & Availability
 - -Implementation Experience

Information Needs (cont)

- Funding Opportunity
- Contact Information
- –Reference Links

Research Needs (Priority Examples)

- Energy Efficiency
 - –Appliances
 - Industrial Applications
 - Transportation Corridor Design
 - –Goods Movement System

Research Needs (cont)

- Battery & Energy Storage Technology
- Low-carbon Fuel
- Vehicle Powertrain Design
- Land Use Guidance
- User-Friendly Modeling Tools
 - Policy Scenarios
 - CEQA Applications
 - General Plans



